

REMARKS

The present preliminary amendment adds new Claims 19-21. Support for the claims can be found in Appendix A.

Applicant presents this Third Request By Applicant For Interference Pursuant to 37 CFR §1.607, wherein Applicant respectfully requests that an interference be declared between the above-referenced application and U.S. Patent 6,482,571 (the '571 patent) issued to Teng and withdraws its previous requests. The information required by 37 CFR §1.607(a) is set forth under headings that correspond to the subsections of §1.607 to facilitate consideration by the Examiner.

REQUEST FOR INTERFERENCE

I. IDENTIFICATION OF THE PATENT WHICH INCLUDES SUBJECT MATTER WHICH INTERFERES WITH THE '454 APPLICATION

The patent which claims subject matter which interferes with subject matter claimed in the present application ("the '454 application") is the '571 patent issued on November 19, 2002 to Gary Ganghui Teng for "On-press development of thermosensitive lithographic plates". The '571 patent was issued on U.S. Application Serial No. No. 09/656,052, filed September 6, 2000 ("the Teng '052 application"), which does not claim benefit on its face to any other U.S. or foreign application. There is no assignee named on the face of the patent.

II. PRESENTATION OF A PROPOSED COUNT

Attached Appendix B sets forth the proposed Count. The proposed Count is an alternative Count prepared after consideration of the subject matter claimed by the respective parties. As required by 37 CFR §1.601(f), the proposed Count "defines the interfering subject matter between . . . one or more applications and one or more patents."

The Count is proposed in alternative form because of the slightly different language utilized by the respective parties to describe the same invention. The interfering subject matter between Maemoto and Teng relates to methods for lithographically printing images on a receiving medium. The proposed Count comprises Claims 1 and 26 of the '571 patent, and Claims 16 and 19 of the present application set forth in the alternative.

III. IDENTIFICATION OF THE CLAIMS OF THE '571 PATENT WHICH CORRESPOND TO THE PROPOSED COUNT

Claims 1-41 of the '571 patent are believed to correspond to the proposed Count. Claims 1 and 26 are independent claims. Claim 1 of the '571 patent is directed to a method of lithographically printing images on a receiving medium. Claim 1 of the '571 patent is one alternative of the Count. Claim 26, the only other independent claim in the '571 patent, is another alternative of the Count. Claims 2-25 and 27-41 depend ultimately from Claims 1 and 26, respectively, and contain no recitations which render them patentably distinct from such claims. Therefore, Claims 1-41 are appropriately designated as corresponding to the Count.

IV. CLAIMS OF THE '454 APPLICATION WHICH CORRESPOND TO THE PROPOSED COUNT

Claims 16-21 of the '454 application should be designated to correspond to the Count. Claims 1-15 were previously canceled without prejudice or disclaimer as to the subject matter contained therein, and Claim 16 was added in the Preliminary Amendment dated November 19, 2003. Claims 16 and 19 are essentially copied from Claim 1 of the '571 patent.

While Claims 16 and 19 of the '454 application do not recite "...and exhibit an affinity or aversion substantially opposite to the affinity or aversion of said substrate to at least one printing liquid selected from the group consisting of ink and an adhesive fluid for ink," the foregoing is an inherent property of lithography, as evidenced by at least the following documents, submitted on April 5, 2004: (1) Photo-offset Fundamentals (John E. Cogoli); (2) PS Plate Practice (Yoshiaki Matsushima; see, e.g., page 8: "Since lithography makes use of an aversion between water and oil, it is premise that in a lithographic plate, hydrophilic substrate surface is provided under oleophilic image"); and (3) Glossary of Printing Useful at the Scene (The Japan Federation of Printing Industries; see, e.g., page 217: "Non-imaging area is made hydrophilic or oil-repellent, and an ink is selectively provided on only an oleophilic imaging area and then is transferred to a paper, etc.")).

V. 35 U.S.C. § 135(b) IS SATISFIED

At least one claim was submitted in the above-referenced application in a Preliminary Amendment dated November 19, 2003, which claim is the same as, or for the same as, or substantially for the same subject matter as a claim of the '571 patent, and such claim (e.g.,

Claim 16) was made prior to one year from the date on which the '571 patent was granted (*i.e.*, November 19, 2002). Thus, § 135(b) is satisfied.

VI. THE '454 APPLICATION IS ENTITLED TO BENEFIT OF ITS EARLIER PARENT APPLICATIONS

The present application is a divisional application of prior U.S. Application No. 09/756,789 filed on January 10, 2001. The present application claims priority to Japanese Application Nos. 2000-006970 filed on January 14, 2000; 2000-016042 filed on January 25, 2000; 2000-018967 filed on January 27, 2000; 2000-018968 filed on January 27, 2000; 2000-102468 filed on April 4, 2000; 2000-102471 filed on April 4, 2000; 2000-102476 filed on April 4, 2000; and 2000-102463 filed on April 4, 2000.

In order to be entitled to benefit of an earlier application, the earlier application must constitute a constructive reduction to practice of the proposed Claim. To constitute a constructive reduction to practice of the proposed Claim, an application needs only to disclose one species within the scope of the Claim. *See, e.g., Mori v. Costain*, 214 USPQ 295, 297 (Bd. Pat. Int. 1981). Here, each of the above-identified applications discloses at least one species within the scope of the Claim.

To aid the Examiner in confirming that the above-identified applications constitute a constructive reduction to practice of the proposed Claim, Applicant has attached as Appendix C an element-by-element list of each feature of Applicant's Claim 16, and a representative passage in the original disclosure where support for the feature exists.

Also attached is a certified translation of each of the above-identified priority applications.


VII. CONCLUSION

Applicant respectfully requests that an interference be declared employing the proposed Count set forth on attached Appendix B, with Claims 1-41 of the '571 patent and Claims 16-21 of the present application designated as corresponding to the Count. Such action is respectfully requested.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicant's undersigned representative to expedite prosecution.

Respectfully submitted,

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Date: July 2, 2004

'454 application claim	Exemplary Support in '454 application
16. A method of lithographically printing images on a receiving area, comprising in order:	p. 1, ll. 13-18 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor for use in the manufacture of such a lithographic printing plate...")
(a) providing a lithographic plate comprising	p. 8, ll. 6-19 ("the object of the present invention is to provide a lithographic printing plate...")
(i) support; and	p. 8, ll. 12-13 ("A lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 14, ll. 10-13 ("In the case of introducing the group at the time of polymerization, a monomer having a functional group described above is preferably emulsion polymerized or suspension polymerized.") p. 25, ll. 7-18 ("Examples of the compound having a thermally reactive group... has a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer...")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 68, l. 6-7 ("...a compound which initiates or accelerares the reaction of the polymer...")
and an infrared absorbing dye;	p. 51, l. 12-13 ("Examples of the dye which absorbs infrared or near infrared light...")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 44, ll. 13-17 ("...the compound contained in the microcapsule is released into the heat-sensitive layer and causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form."); p. 46, ll. 16-20 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
is soluble and on-press developable with ink and/or fountain solution;	p. 3, ll. 11-12 ("photosensitive layer soluble in a fountain solution or an ink solvent")

(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and	p. 125, ll. 10-11 (“Lithographic printing plate precursors were prepared, image exposed...”) p. 113, ll. 10-16 (“The lithographic printing plate ... can form an image by the exposure with a high output laser... emitting light in the infrared or near infrared region is preferred...”)
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas,	p. 114, ll. 16-25 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...”) p. 31, l. 17 – p. 32, l. 4 (“In the lithographic printing plate precursor of the present invention...the compound causes a chemical reaction by heat at the image formation and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation and even after aging, the plate can exhibit good on-press developability.”)
and to lithographically print images from said plate to the receiving area.	p. 1, ll. 13-16 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.”)
17. The method of claim 16 wherein said heat-sensitive layer further comprises a non-ionic surfactant.	p. 78, ll. 17-18 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
18. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 114, ll. 16-25 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.”)
19. A method of lithographically printing images on a receiving area, comprising in order:	p. 1, ll. 13-18 (“In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor for use in the manufacture of such a lithographic printing plate...”)
(a) providing a lithographic plate comprising	p. 8, ll. 6-19 (“the object of the present invention is to provide a lithographic printing plate...”)

(i) a support;	p. 8, ll. 12-13 ("A lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 14, ll. 10-13 ("In the case of introducing the group at the time of polymerization, a monomer having a functional group described above is preferably emulsion polymerized or suspension polymerized.") p. 25, ll. 7-18 ("Examples of the compound having a thermally reactive group... has a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer...")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 68, l. 6-7 ("...a compound which initiates or accelerates the reaction of the polymer...")
and an infrared absorbing dye or pigment;	p. 51, l. 12-13 ("Examples of the dye which absorbs infrared or near infrared light...")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 44, ll. 13-17 ("...the compound contained in the microcapsule is released into the heat-sensitive layer and causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form."); p. 46, ll. 16-20 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
is soluble or dispersible in and on-press developable with ink and/or fountain solution;	p. 3, ll. 11-12 ("photosensitive layer soluble in a fountain solution or an ink solvent")
(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or cross-linking of the heat-sensitive layer in the exposed areas; and	p. 125, ll. 10-11 ("Lithographic printing plate precursors were prepared, image exposed...") p. 113, ll. 10-16 ("The lithographic printing plate ... can form an image by the exposure with a high output laser... emitting light in the infrared or near infrared region is preferred...")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-cross-linked areas,	p. 114, ll. 16-25 ("The thus exposed plate is fixed to a cylinder of the printing machine... supplying fountain solution and ink to the printing plate...") p. 31, l. 17 – p. 32, l. 4 ("In the lithographic printing plate precursor of the present invention... the compound causes a chemical reaction by heat at the image formation and

	then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation and even after aging, the plate can exhibit good on-press developability.”)
and to lithographically print images from said plate to the receiving area.	p. 1, ll. 13-16 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.”)
20. The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic surfactant.	p. 78, ll. 17-18 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
21. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 114, ll. 16-25 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.”)

APPENDIX B

Claim 1 of the '571 patent:

A method of lithographically printing images on a receiving medium, comprising in order:

- (a) providing a lithographic plate comprising (i) a substrate; and (ii) a thermosensitive layer comprising a polymerizable monomer or oligomer, an initiator capable of initiating the polymerization of said monomer or oligomer, and an infrared absorbing dye or pigment; wherein said thermosensitive layer is capable of hardening upon exposure to an infrared laser radiation, is soluble or dispersible in and on-press developable with ink and/or fountain solution, and exhibits an affinity or aversion substantially opposite to the affinity or aversion of said substrate to at least one printing liquid selected from the group consisting of ink and an adhesive fluid for ink;
- (b) imagewise exposing the plate with the infrared laser radiation to cause hardening of the thermosensitive layer in the exposed areas; and
- (c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the thermosensitive layer in the non-hardened areas, and to lithographically print images from said plate to the receiving medium.

Or

Claim 26 of the '571 patent:

A method of lithographically printing images on a receiving medium, comprising in order:

- (a) mounting onto a plate cylinder of a lithographic press a lithographic plate comprising (i) a substrate; and (ii) a thermosensitive layer capable of hardening through polymerization or solubilization through decomposition upon exposure to an infrared laser radiation, the non-hardened or solubilized areas of said thermosensitive layer being soluble or dispersible in and on-press developable with ink and/or fountain solution, and said thermosensitive layer exhibiting an affinity or aversion substantially opposite to the affinity or aversion of said substrate to at least one printing liquid selected from the group consisting of ink and an adhesive fluid for ink;
- (b) imagewise exposing the plate with the infrared laser radiation to cause hardening or solubilization of the thermosensitive layer in the exposed areas; and
- (c) operating said press to contact said exposed plate with ink and/or fountain solution to remove the thermosensitive layer in the non-hardened or solubilized areas, and to lithographically print images from said plate to the receiving medium.

Or

Claim 16 of the '454 application:

A method of lithographically printing images on a receiving area, comprising in order:

(a) providing a lithographic plate comprising (i) support; and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer, an initiator capable of initiating the polymerization of said monomer or oligomer, and an infrared absorbing dye or pigment; wherein said heat-sensitive layer is capable of cross-linking upon exposure to an infrared laser radiation, is soluble and on-press developable with ink and/or fountain solution;

(b) image exposing the plate with the infrared laser radiation to cause cross-linking of the heat-sensitive layer in the exposed areas; and

(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas, and to lithographically print images from said plate to the receiving area.

Or

Claim 19 of the '454 application:

A method of lithographically printing images on a receiving area, comprising in order:

(a) providing a lithographic plate comprising (i) a support; and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer, an initiator capable of initiating the polymerization of said monomer or oligomer, and an infrared absorbing dye or pigment; wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation, is soluble or dispersible and on-press developable with ink and/or fountain solution;

(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and

(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas, and to lithographically print images from said plate to the receiving area.

'454 application claim	Exemplary Support in JP 2000-006970
16. A method of lithographically printing images on a receiving area, comprising in order:	p. 1, l. 25 – p. 2, l. 4 (“In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...”)
(a) providing a lithographic plate comprising	p. 8, ll. 17-19 (“the object of the present invention is to provide a lithographic printing plate...”)
(i) support; and	p. 9, ll. 2-4 (“the lithographic printing plate precursor comprising a hydrophilic support...”)
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 32, l. 17 – p. 33, l. 14 (“The heat-sensitive layer...a radical polymerizable compound...a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer”)
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 31, l. 24 – p. 32, l. 1 (“a compound which initiates or accelerates the reaction may be added.”)
and an infrared absorbing dye;	p. 13, ll. 14-19 (“The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.”)
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 32, l. 17 – p. 33, l. 2 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ... the effect by the crosslinking”)
is soluble and on-press developable with ink and/or fountain solution;	p. 3, ll. 20-24 (“The plate-making system of the printing plate is called on-press development. ... a method of using a photosensitive layer soluble in a fountain solution or an ink solvent”)
(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 12 (“imagewise exposure”); p. 32, l. 17 – p. 33, l. 2 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine

	particulate polymer, by heat used for the image formation. ... the effect by the crosslinking")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas,	p. 7, ll. 10-12 ("fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink"); 32, l. 17-p. 33, l. 2 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation... the effect by the crosslinking")
and to lithographically print images from said plate to the receiving area.	p. 1, l. 25 – p. 2, l. 3 ("the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.")
17. The method of claim 16 wherein said heat-sensitive layer further comprises a non-ionic surfactant.	p. 41, ll. 4-6 ("The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...")
18. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 75, l. 20 – p. 76, l. 4 ("The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.")
19. A method of lithographically printing images on a receiving area, comprising in order:	p. 1, l. 25 – p. 2, l. 4 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 8, ll. 17-19 ("the object of the present invention is to provide a lithographic printing plate...")
(i) a support;	p. 9, ll. 2-4 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 32, l. 17 – p. 33, l. 14 ("The heat-sensitive layer...a radical polymerizable compound...a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 31, l. 24 – p. 32, l. 1 ("a compound which initiates or accelerates the reaction may be

	added...")
and an infrared absorbing dye or pigment;	p. 13, ll. 14-19 ("The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 32, l. 17-p. 33, l. 2 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ... the effect by the crosslinking")
is soluble or dispersible in and on-press developable with ink and/or fountain solution;	p. 3, ll. 20-24 ("The plate-making system of the printing plate is called on-press development. ... a method of using a photosensitive layer soluble in a fountain solution or an ink solvent")
(b)image exposing the plate with the infrared laser radiation to cause polymerizing and/or cross-linking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 12 ("imagewise exposure"); p. 32, l. 17 – p. 33, l. 2 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ... the effect by the crosslinking")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-cross-linked areas,	p. 7, ll. 10-12 ("fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink."); 32, l. 17-p. 33, l. 2 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ... the effect by the crosslinking")
and to lithographically print images from said plate to the receiving area.	p. 1, l. 25 – p. 2, l. 3 ("the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.")
20. The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic surfactant.	p. 41, ll. 4-6 ("The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...")

21. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.

p. 75, l. 20 – p. 76, l. 4 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.”)

'454 application claim	Exemplary Support in JP 2000-16042
16. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 1-8 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 8, ll. 18-20 ("the object of the present invention is to provide a lithographic printing plate...")
(i) support; and	p. 9, ll. 3-5 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 35, l. 16 – p. 36, l. 16 ("The heat-sensitive layer... a radical polymerizable compound... a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 34, l. 24 – p. 35, l. 1 ("a compound which initiates or accelerates the reaction may be added.")
and an infrared absorbing dye;	p. 16, l. 22 – p. 17, l. 3 ("The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 35, l. 16-p. 36, l. 1 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a...compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking")
is soluble and on-press developable with ink and/or fountain solution;	p. 3, ll. 20-24 ("The plate-making system of the printing plate is called on-press development. ...a method of using a photosensitive layer soluble in a fountain solution or an ink solvent")
(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 13 ("imagewise exposure"); p. 35, l. 16-p. 36, l. 1 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a...compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image

	formation. ...the effect by the crosslinking")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas,	p. 7, ll. 11-13 ("fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink."); p. 35, l. 16-p. 36, l. 1 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a...compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking")
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 1-5 ("the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.")
17. The method of claim 16 wherein said heat-sensitive layer further comprises a non-ionic surfactant.	p. 44, ll. 5-6 ("The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...")
18. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 78, l. 21 – p. 79, l. 5 ("The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing")
19. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 1-5 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 8, ll. 18-20 ("the object of the present invention is to provide a lithographic printing plate...")
(i) a support;	p. 9, ll. 3-5 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 35, l. 16 – p. 36, l. 16 ("The heat-sensitive layer... a radical polymerizable compound...a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 34, l. 24 – p. 35, l. 1 ("a compound which initiates or accelerates the reaction may be added.")

and an infrared absorbing dye or pigment;	p. 16, l. 22 – p. 17, l. 3 (“The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.”)
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 35, l. 16 – p. 36, l. 1 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a...compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking”)
is soluble or dispersible in and on-press developable with ink and/or fountain solution;	p. 3, ll. 20-24 (“The plate-making system of the printing plate is called on-press development. ...a method of using a photosensitive layer soluble in a fountain solution or an ink solvent”)
(b)image exposing the plate with the infrared laser radiation to cause polymerizing and/or cross-linking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 13 (“imagewise exposure”); p. 35, l. 16 – p. 36, l. 1 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking”)
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-cross-linked areas,	p. 7, ll. 11-13 (“fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink.”); p. 35, l. 16 – p. 36, l. 1 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a...compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking”)
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 1-5 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.”)
20. The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic	p. 44, ll. 5-6 (“The composition for the heat-sensitive layer of the present invention may

surfactant.	contain a nonionic surfactant...")
21. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 78, l. 21 – p. 79, l. 5 ("The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing")

'454 application claim	Exemplary Support in JP 2000-18967
16. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 12-16 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 9, ll. 4-6 ("the object of the present invention is to provide a lithographic printing plate...")
(i) support; and	p. 9, l. 15-16 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 11, l. 22 – p. 12, l. 8 ("Examples of the compound having a thermally reactive group... a radical polymerizable compound... a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 39, l. 23 – p. 40, l. 2 ("a compound which initiates or accelerates the reaction may be added. ...")
and an infrared absorbing dye;	p. 22, ll. 10-15 ("The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 18, ll. 9-17 ("the compound causes a chemical reaction by heat at an image formation and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. ..."); p. 22, ll. 5-9 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
is soluble and on-press developable with ink and/or fountain solution;	p. 4, ll. 7-13 ("The plate-making system of the printing plate is called on-press development. ...a method of using a photosensitive layer soluble in a fountain solution or an ink solvent.")
(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or	p. 5, l. 24 ("imagewise exposure"); p. 18, ll. 9-17 ("the compound causes a chemical reaction

crosslinking of the heat-sensitive layer in the exposed areas; and	by heat at an image formation and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. ..."); p. 22, ll. 5-9 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas,	p. 7, ll. 22-24 ("fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink"); p. 18, ll. 5-17 ("In the lithographic printing plate precursor of the present invention...the compound causes a chemical reaction by heat at an image formation and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation and even after aging, the plate can exhibit good on-press developability.")
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 12-15 ("the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.")
17. The method of claim 16 wherein said heat-sensitive layer further comprises a non-ionic surfactant.	p. 42, ll. 23-25 ("The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...")
18. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 77, l. 19 – p. 78, l. 3 ("The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.")
19. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 12-16 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 9, ll. 4-6 ("the object of the present invention is to provide a lithographic printing

	plate...”)
(i) a support;	p. 9, l. 15-16 (“the lithographic printing plate precursor comprising a hydrophilic support...”)
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 11, l. 22 – p. 12, l. 8 (“Examples of the compound having a thermally reactive group... a radical polymerizable compound... a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer”)
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 39, l. 23 – p. 40, l. 2 (“a compound which initiates or accelerates the reaction may be added. ...”)
and an infrared absorbing dye or pigment;	p. 22, ll. 10-15 (“The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.”)
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 18, ll. 9-17 (“the compound causes a chemical reaction by heat at an image formation and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. ...”); p. 22, ll. 5-9 (“When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.”)
is soluble or dispersible in and on-press developable with ink and/or fountain solution;	p. 4, ll. 7-13 (“The plate-making system of the printing plate is called on-press development. ...a method of using a photosensitive layer soluble in a fountain solution or an ink solvent...”)
(b)image exposing the plate with the infrared laser radiation to cause polymerizing and/or cross-linking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 24 (“imagewise exposure”); p. 18, ll. 9-17 (“the compound causes a chemical reaction by heat at an image formation and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. ...”); p. 22, ll. 5-9 (“When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.”)

(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-cross-linked areas,	p. 7, ll. 22-24 (“fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink”); p. 18, ll. 5-17 (“In the lithographic printing plate precursor of the present invention...the compound causes a chemical reaction by heat at an image formation and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation and even after aging, the plate can exhibit good on-press developability.”)
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 12-15 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.”)
20. The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic surfactant.	p. 42, ll. 23-25 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
21. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 77, l. 19 – p. 78, l. 3 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing”)

'454 application claim	Exemplary Support in JP 2000-18968
16. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 1-5 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 8, ll. 18-20 ("the object of the present invention is to provide a lithographic printing plate...")
(i) support; and	p. 9, ll. 3-4 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 11, ll. 12-23 ("Examples of the compound having a thermally reactive group...a radical polymerizable compound...a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer...")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 37, l. 24 – p. 38, l. 1 ("a compound which initiates or accelerates the reaction may be added.")
and an infrared absorbing dye;	p. 20, ll. 3-8 ("The light-to-heat converting material... include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 17, l. 24 – p. 18, l. 3 ("the compound...causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form."); p. 19, l. 22 – p. 20, l. 2 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
is soluble and on-press developable with ink and/or fountain solution;	p. 3, ll. 20-24 ("The plate-making system of the printing plate is called on-press development. ..., a method of using a photosensitive layer soluble in a fountain

	solution or an ink solvent...")
(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 13 ("imagewise exposure"); p. 17, l. 24 – p. 18, l. 3 ("the compound... causes a chemical reaction, and thereby molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form."); p. 19, l. 22 – p. 20, l. 2 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas,	p. 7, ll. 11-13 ("fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink."); p. 17, l. 19 – p. 18, l. 7 ("In the lithographic printing plate precursor of the present invention...the compound ...causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation, and good on-press developability can be exhibited.")
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 1-5 ("the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.")
17. The method of claim 16 wherein said heat-sensitive layer further comprises a non-ionic surfactant.	p. 40, ll. 24-25 ("The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...")
18. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 75, l. 14 – p. 76, l. 1 ("The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.")

19. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 1-5 (“In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...”)
(a) providing a lithographic plate comprising	p. 8, ll. 18-20 (“the object of the present invention is to provide a lithographic printing plate...”)
(i) a support;	p. 9, ll. 3-4 (“the lithographic printing plate precursor comprising a hydrophilic support...”)
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 11, ll. 12-22 (“Examples of the compound having a thermally reactive group... a radical polymerizable compound... a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer...”)
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 37, l. 24 – p. 38, l. 1 (“a compound which initiates or accelerates the reaction may be added.”)
and an infrared absorbing dye or pigment;	p. 20, ll. 3-8 (“The light-to-heat converting material... include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.”)
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 17, l. 24 – p. 18, l. 3 (“the compound... causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form.”); p. 19, l. 22 – p. 20, l. 2 (“When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.”)
is soluble or dispersible in and on-press developable with ink and/or fountain solution;	p. 3, ll. 20-24 (“The plate-making system of the printing plate is called on-press development. ..., a method of using a photosensitive layer soluble in a fountain

	solution or an ink solvent...")
(b)image exposing the plate with the infrared laser radiation to cause polymerizing and/or cross-linking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 13 ("imagewise exposure"); p. 17, l. 24 – p. 18, l. 3 ("the compound... causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form..."); p. 19, l. 22 – p. 20, l. 2 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-cross-linked areas,	p. 7, ll. 11-13 ("fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink."); p. 17, l. 19 – p. 18, l. 7 ("In the lithographic printing plate precursor of the present invention...the compound...causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation, and even after aging, the plate can exhibit good on-press developability can be inhibited.")
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 1-5 ("the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.")
20. The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic surfactant.	p. 40, ll. 24-25 ("The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...")
21. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 75, l. 14 – p. 76, l. 1 ("The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.")

'454 application claim	Exemplary Support in JP 2000-102463
16. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 8-12 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 8, l. 25 – p. 9, l. 2 ("the object of the present invention is to provide a lithographic printing plate...")
(i) support; and	p. 9, ll. 10-11 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 11, l. 19 – p. 12, l. 5 ("Examples of the compound having a thermally reactive group... a radical polymerizable compound... a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 39, ll. 13-14 ("a compound which initiates or accelerates the reaction may be added.")
and an infrared absorbing dye;	p. 20, l. 20 – p. 21, l. 1 ("The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 18, ll. 6-10 ("the compound...causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form."); p. 20, ll. 4-8 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
is soluble and on-press developable with ink and/or fountain solution;	p. 4, ll. 3-7 ("The plate-making system of the printing plate is called on-press development. ... a method of using a photosensitive layer soluble in a fountain solution or an ink solvent")
(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 20 ("imagewise exposure"); p. 18, ll. 6-10 ("the compound...causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer

	changes into a three-dimensional crosslinked form.”); p. 20, ll. 4-8 (“When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.”)
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas,	p. 7, ll. 18-20 (“fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink”); p. 18, ll. 1-17 (“In the lithographic printing plate precursor of the present invention...the compound...causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation, and good on-press developability can be exhibited.”)
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 8-11 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution”)
17. The method of claim 16 wherein said heat-sensitive layer further comprises a non-ionic surfactant.	p. 42, ll. 23-25 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
18. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 77, l. 19 – p. 78, l. 3 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.”)
19. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 8-12 (“In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...”)
(a) providing a lithographic plate comprising	p. 8, l. 25 – p. 9, l. 2 (“the object of the present invention is to provide a lithographic printing plate...”)
(i) a support;	p. 9, ll. 10-11 (“the lithographic printing plate precursor comprising a hydrophilic

	support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 11, l. 19 – p. 12, l. 5 ("Examples of the compound having a thermally reactive group... a radical polymerizable compound... a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 39, ll. 13-14 ("a compound which initiates or accelerates the reaction may be added.")
and an infrared absorbing dye or pigment;	p. 20, l. 20 – p. 21, l. 1 ("The light-to-heat converting material include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 18, ll. 6-10 ("the compound...causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form."); p. 20, ll. 4-8 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
is soluble or dispersible in and on-press developable with ink and/or fountain solution;	p. 4, ll. 3-7 ("The plate-making system of the printing plate is called on-press development. ... a method of using a photosensitive layer soluble in a fountain solution or an ink solvent")
(b)image exposing the plate with the infrared laser radiation to cause polymerizing and/or cross-linking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 20 ("imagewise exposure"); p. 18, ll. 6-10 ("the compound...causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form."); p. 20, ll. 4-8 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-cross-linked areas,	p. 7, ll. 18-20 ("fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink"); p. 18, ll. 1-17 ("In the lithographic printing plate precursor of the present

	invention...the compound...causes a chemical reaction, and thereby the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation, and good on-press developability can be exhibited.”)
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 8-11 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution”)
20. The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic surfactant.	p. 42, ll. 23-25 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
21. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 77, l. 19 – p. 78, l. 3 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.”)

'454 application claim	Exemplary Support in JP 2000-102468
16. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 8-12 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 8, l. 25 – p. 9, l. 2 ("the object of the present invention is to provide a lithographic printing plate...")
(i) support; and	p. 9, ll. 10-11 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 33, ll. 4-25 ("The heat-sensitive layer...a radical polymerizable compound...a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 32, ll. 10-11 ("a compound which initiates or accelerates the reaction may be added.")
and an infrared absorbing dye;	p. 13, l. 22 – p. 14, l. 3 ("The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 33, ll. 4-13 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking")
is soluble and on-press developable with ink and/or fountain solution;	p. 4, ll. 3-7 ("The plate-making system of the printing plate is called on-press development. ...a method of using a photosensitive layer soluble in a fountain solution or an ink solvent")
(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 20 ("imagewise exposure"); p. 33, ll. 4-13 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking")

(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas,	p. 7, ll. 18-20 (“fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink”); p. 33, ll. 4-13 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking”)
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 8-11 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution.”)
17. The method of claim 16 wherein said heat-sensitive layer further comprises a non-ionic surfactant.	p. 41, ll. 15-16 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
18. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 76, l. 17 – p. 77, l. 1 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.”)
19. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 8-12 (“In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...”)
(a) providing a lithographic plate comprising	p. 8, l. 25 – p. 9, l. 2 (“the object of the present invention is to provide a lithographic printing plate...”)
(i) a support;	p. 9, l. 10-11 (“the lithographic printing plate precursor comprising a hydrophilic support...”)
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 33, ll. 4-25 (“The heat-sensitive layer...a radical polymerizable compound...a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer”)
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 32, ll. 10-11 (“a compound which initiates or accelerates the reaction may be added.”)
and an infrared absorbing dye or pigment;	p. 13, l. 22 – p. 14, l. 3 (“The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.”)

wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 33, ll. 4-13 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking”)
is soluble or dispersible in and on-press developable with ink and/or fountain solution;	p. 4, ll. 3-7 (“The plate-making system of the printing plate is called on-press development. ...a method of using a photosensitive layer soluble in a fountain solution or an ink solvent”)
(b)image exposing the plate with the infrared laser radiation to cause polymerizing and/or cross-linking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 20 (“imagewise exposure”); p. 33, ll. 4-13 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation... the effect by the crosslinking”)
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-cross-linked areas,	p. 7, ll. 18-20 (“fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink”); p. 33, ll. 4-13 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking”)
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 8-11 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution”)
20. The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic surfactant.	p. 41, ll. 15-16 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
21. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 76, l. 17 – p. 77, l. 1 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.”)

'454 application claim	Exemplary Support in JP 2000-102471
16. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 9-13 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 9, ll. 1-3 ("the object of the present invention is to provide a lithographic printing plate...")
(i) support; and	p. 9, l. 11-13 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 36, l. 4 – p. 37, l. 3 ("The heat-sensitive layer...a radical polymerizable compound...a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 35, ll. 10-11 ("a compound which initiates or accelerates the reaction may be added...")
and an infrared absorbing dye;	p. 17, ll. 7-12 ("The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 36, ll. 4-13 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking")
is soluble and on-press developable with ink and/or fountain solution;	p. 4, ll. 4-8 ("The plate-making system of the printing plate is called on-press development. ...a method of using a photosensitive layer soluble in a fountain solution or an ink solvent")
(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 21 ("imagewise exposure"); p. 36, ll. 4-13 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a...compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image

	formation. ...the effect by the crosslinking")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas,	p. 7, ll. 19-21 ("fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink."); p. 36, ll. 4-13 ("The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a...compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking")
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 9-12 ("the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution")
17. The method of claim 16 wherein said heat-sensitive layer further comprises a non-ionic surfactant.	p. 44, ll. 17-18 ("The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...")
18. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 79, ll. 14-23 ("The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing.")
19. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 9-13 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 9, ll. 1-3 ("the object of the present invention is to provide a lithographic printing plate...")
(i) a support;	p. 9, ll. 11-13 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 36, l. 4 – p. 37, l. 3 ("The heat-sensitive layer...a radical polymerizable compound...a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 35, ll. 10-11 ("a compound which initiates or accelerates the reaction may be added...")
and an infrared absorbing dye or pigment;	p. 17, ll. 7-12 ("The light-to-heat converting material include...dye. In particular,

	compounds which absorb infrared light and converts it into heat are preferred.”)
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 36, ll. 4-13 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking”)
is soluble or dispersible in and on-press developable with ink and/or fountain solution;	p. 4, ll. 4-8 (“The plate-making system of the printing plate is called on-press development. ...a method of using a photosensitive layer soluble in a fountain solution or an ink solvent”)
(b)image exposing the plate with the infrared laser radiation to cause polymerizing and/or cross-linking of the heat-sensitive layer in the exposed areas; and	p. 5, l. 21 (“imagewise exposure”); p. 36, ll. 4-13 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking”)
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-cross-linked areas,	p. 7, ll. 19-21 (“fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink”); p. 36, ll. 4-13 (“The heat-sensitive layer of the lithographic printing plate precursor of the present invention may further contain a compound having a functional group or a protective group thereof, which is capable of reacting with the reactive group in the fine particulate polymer, by heat used for the image formation. ...the effect by the crosslinking”)
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 9-12 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution”)
20. The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic surfactant.	p. 44, ll. 17-18 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
21. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-	p. 79, ll. 14-23 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink

press development with ink and/or fountain solution, and lithographic printing.	to the printing plate...starting the printing.”)
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'454 application claim	Exemplary Support in JP 2000-102476
16. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 18-22 ("In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...")
(a) providing a lithographic plate comprising	p. 9, ll. 11-13 ("the object of the present invention is to provide a lithographic printing plate...")
(i) support; and	p. 9, ll. 22-23 ("the lithographic printing plate precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 12, ll. 4-15 ("Examples of the compound having a thermally reactive group...a radical polymerizable compound...a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer...")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 41, ll. 10-11 ("a compound which initiates or accelerates the reaction may be added.")
and an infrared absorbing dye;	p. 23, ll. 4-9 ("The light-to-heat converting material...include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 18, ll. 16-20 ("the compound causes a chemical reaction... and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form."); p. 22, ll. 12-16 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
is soluble and on-press developable with ink and/or fountain solution;	p. 4, ll. 14-18 ("The plate-making system of the printing plate is called on-press development. ..., a method of using a photosensitive layer soluble in a fountain solution or an ink solvent...")
(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and	p. 6, l. 6 ("imagewise exposure"); p. 18, ll. 16-20 ("the compound causes a chemical reaction... and then the molecular structure in the image area of the heat-sensitive layer

	changes into a three-dimensional crosslinked form.”); p. 22, ll. 12-16 (“When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.”)
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas,	p. 8, ll. 4-6 (“fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink.”); p. 18, ll. 12-24 (“In the lithographic printing plate precursor of the present invention...the compound ...causes a chemical reaction by heat at an image formation and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation and even after aging, the plate can exhibit good on-press developability.”)
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 18-22 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution”)
17. The method of claim 16 wherein said heat-sensitive layer further comprises a non-ionic surfactant.	p. 44, ll. 10-12 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
18. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 79, ll. 7-16 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing”)
19. A method of lithographically printing images on a receiving area, comprising in order:	p. 2, ll. 18-22 (“In general, the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution. As the lithographic printing plate precursor...”)
(a) providing a lithographic plate comprising	p. 9, ll. 11-13 (“the object of the present invention is to provide a lithographic printing plate...”)
(i) a support;	p. 9, ll. 22-23 (“the lithographic printing plate

	precursor comprising a hydrophilic support...")
and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer,	p. 12, ll. 4-15 ("Examples of the compound having a thermally reactive group... a radical polymerizable compound... a chemical form of, for example, monomer, prepolymer, more specifically, dimer, trimer or oligomer...")
an initiator capable of initiating the polymerization of said monomer or oligomer,	p. 41, ll. 10-11 ("a compound which initiates or accelerates the reaction may be added.")
and an infrared absorbing dye or pigment;	p. 23, ll. 4-9 ("The light-to-heat converting material include...dye. In particular, compounds which absorb infrared light and converts it into heat are preferred.")
wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation,	p. 18, ll. 16-20 ("the compound causes a chemical reaction... and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form."); p. 22, ll. 12-16 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
is soluble or dispersible in and on-press developable with ink and/or fountain solution;	p. 4, ll. 14-18 ("The plate-making system of the printing plate is called on-press development. ..., a method of using a photosensitive layer soluble in a fountain solution or an ink solvent...")
(b)image exposing the plate with the infrared laser radiation to cause polymerizing and/or cross-linking of the heat-sensitive layer in the exposed areas; and	p. 6, l. 6 ("imagewise exposure"); p. 18, ll. 16-20 ("the compound causes a chemical reaction... and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form..."); p. 22, ll. 12-16 ("When a light-to-heat converting material is incorporated into the heat-sensitive layer or a layer adjacent thereto, the lithographic printing plate precursor of the present invention can perform writing of an image by the irradiation of a laser light or the like.")
(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-cross-linked areas,	p. 8, ll. 4-6 ("fixing the plate on a cylinder of a printing machine and performing on-press development with fountain solution and/or ink"); p. 18, ll. 12-24 ("In the lithographic printing plate precursor of the present

	invention...the compound...causes a chemical reaction by heat at an image formation and then the molecular structure in the image area of the heat-sensitive layer changes into a three-dimensional crosslinked form. As a result thereof, the solubility of the image area in water or an aqueous solution greatly differs between before and after the image formation and even after aging, the plate can exhibit good on-press developability.”)
and to lithographically print images from said plate to the receiving area.	p. 2, ll. 18-22 (“the lithographic printing plate comprises an ink-receptive image area for receiving ink during the printing process and a hydrophilic non-image area for receiving a fountain solution”)
20. The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic surfactant.	p. 44, ll. 10-12 (“The composition for the heat-sensitive layer of the present invention may contain a nonionic surfactant...”)
21. The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.	p. 79, ll. 7-16 (“The thus exposed plate is fixed to a cylinder of the printing machine...supplying fountain solution and ink to the printing plate...starting the printing”)